

## Technical data

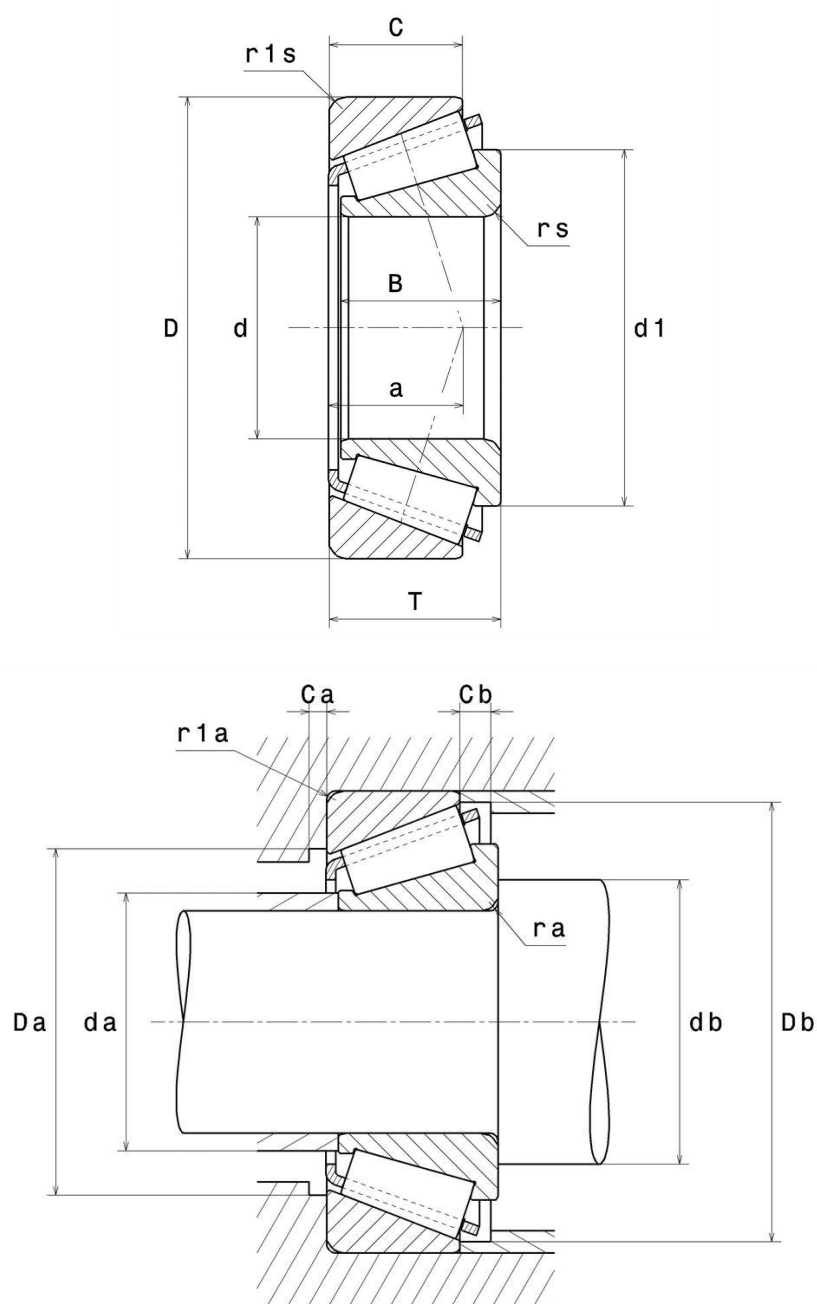
### 33018U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage



#### VISUAL (S)



# 33018U

Single row tapered roller bearings

| PRODUCT DEFINITION                |          |
|-----------------------------------|----------|
| Brand                             | NTN      |
| d - Internal diameter             | 90 mm    |
| D - External diameter             | 140 mm   |
| B - Bearing/Inner ring width      | 39 mm    |
| C - Outer ring width              | 32,5 mm  |
| T - Total width                   | 39 mm    |
| d1 - External diameter inner ring | 115,5 mm |
| a - Charge load application point | 28 mm    |
| rs - Min fillet radius            | 2 mm     |
| r1s - Min fillet radius           | 1,5 mm   |
| Mass                              | 2,22 kg  |
| ISO 355 reference                 | T2CE090  |

| PRODUCT PERFORMANCE                    |              |
|----------------------------------------|--------------|
| C - Dynamic load                       | 238000000 mN |
| C0 - Static load                       | 360000000 mN |
| Cu - Fatigue limit load                | 42000000 mN  |
| A2 - Rating life coefficient           | 1            |
| e - Coefficient                        | 0.27         |
| Y0 - Static axial load coefficient     | 1.23         |
| Y2 - Upper axial load coefficient      | 2.23         |
| N lim - Oil lubrication limit speed    | 19800 °/s    |
| N lim - Grease lubrication limit speed | 15000 °/s    |
| Tmin - Min operating temperature       | 233,15 °K    |



## NTN Europe

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 S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072  
 SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

# 33018U

Single row tapered roller bearings

## PRODUCT PERFORMANCE

|                                         |           |
|-----------------------------------------|-----------|
| <b>Tmax - Max operating temperature</b> | 393,15 °K |
|-----------------------------------------|-----------|

## ABUTMENT

|                                          |          |
|------------------------------------------|----------|
| <b>da max - Max shoulder diameter IR</b> | 100 mm   |
| <b>db min - Min IR shoulder diameter</b> | 100 mm   |
| <b>Da min - Min shoulder diameter OR</b> | 127 mm   |
| <b>Da max - Max shoulder diameter OR</b> | 131,5 mm |
| <b>Db min - Min OR shoulder diameter</b> | 135 mm   |
| <b>Ca - Min clearance</b>                | 7 mm     |
| <b>Cb - Min clearance</b>                | 6,5 mm   |
| <b>ra max - Max fillet radius</b>        | 2 mm     |
| <b>r1a - Max fillet radius</b>           | 1,5 mm   |



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INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$P = X.F_r + Y.F_a$

| $F_a / F_r \leq e$ |   | $F_a / F_r > e$ |    |
|--------------------|---|-----------------|----|
| X                  | Y | X               | Y  |
| 1                  | 0 | 0.4             | Y2 |

Equivalent static radial load

$P_0 = X_0.F_r + Y_0.F_a$

| $X_0$ | $Y_0$ |
|-------|-------|
| 0.5   | Y0    |

If  $P_0 \leq F_r$ , then use  $P_0 = F_r$

The values for e, Y2 and Y0 are shown in the above table

